FIELD CONTROLS

Solutions for the Great Indoors®

Air Purification

New Package!
24 volt transformer included!

AIR PURIFICATION GUIDE

www.fieldcontrols.com

June 2007

UVaire® BY FIELD CONTROLS Air Purification System

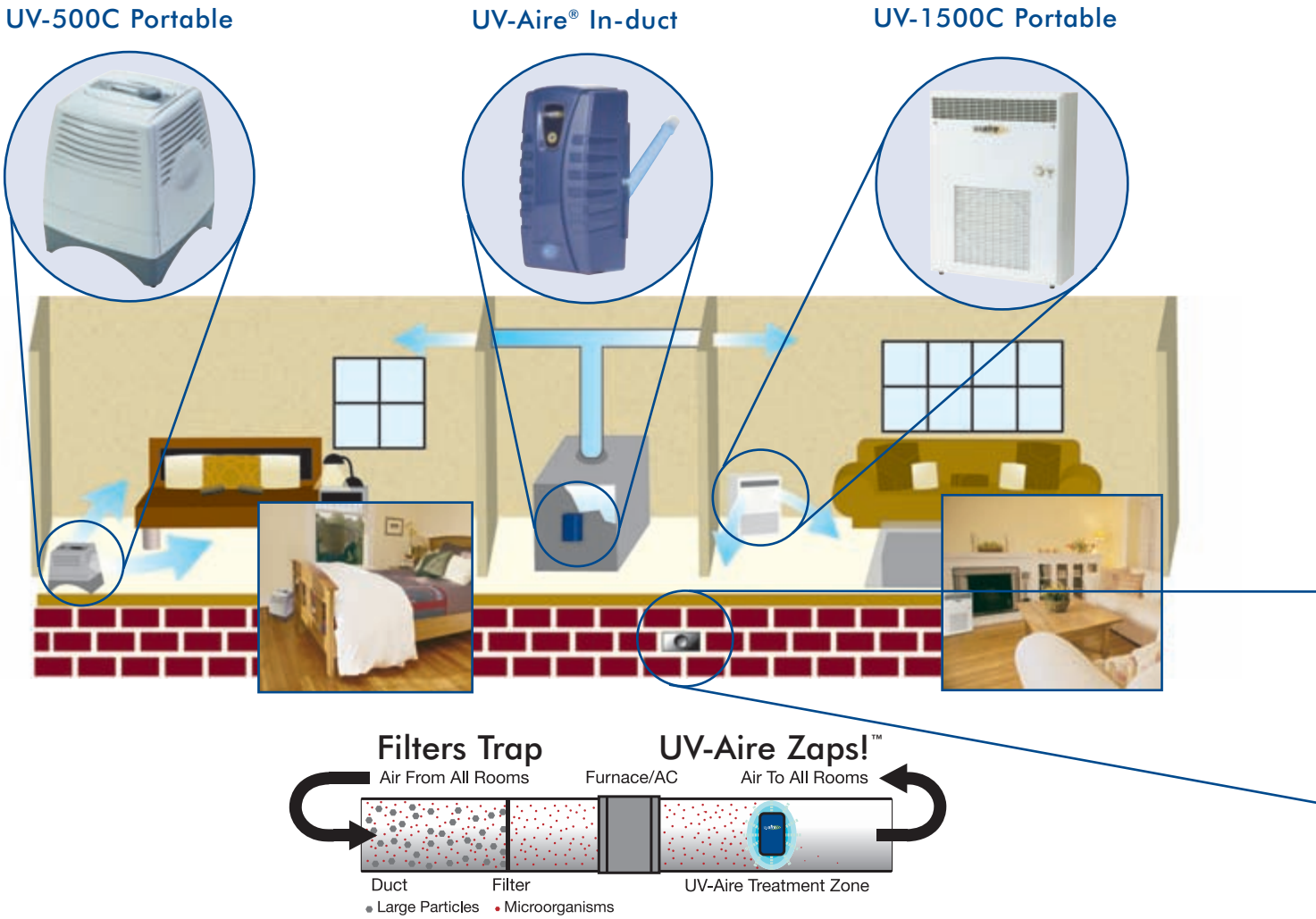
The Whole House Solution

Field Controls offers a complete line of UV-Aire products for any home or business, with a variety of duct-mounted UV-Aire models designed for forced-air heating and cooling systems. UV-Aire germicidal lamps continuously attack airborne mold, bacteria and viruses as they circulate through your ductwork.

For homes and businesses without a forced-air system, Field Controls manufactures two portable models. The portable models combine the purifying power of UV with high efficiency filtration and carbon filtration to reduce dust, pollen, odors, and Volatile Organic Compounds (VOCs).

The UV-500C and UV-1500C provide concentrated UV germicidal protection in bedrooms, living rooms, and offices… where it's needed most. Each portable model utilizes a motorized fan with multi-speed control to quietly and efficiently circulate and treat indoor air. The UV-500C is recommended for rooms up to 500 square feet, while the UV-1500C can purify areas up to 1500 square feet.

For those who require extra protection, the 24/7 benefits of the in-duct models can be enhanced with the concentrated power of the portable units. The combined use of portable and in-duct models is an extremely effective whole house solution. This approach is recommended for anyone with allergies, respiratory illnesses such as asthma, or a compromised immune system*.



With 40-75 air changes per day during normal operation, the cumulative effect of UV-Aire in-duct models reduces airborne bacterial concentrations. UV-Aire works in combination with a quality filter. An upgraded media filter (MERV 8 or higher) is recommended. Filters trap larger particles, allowing microscopic organisms to pass through where they are zapped in the UV-Aire treatment zone.

**UV-Aire is not a medical device and makes no medical claims.*

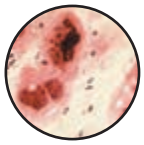
UV-Aire® Air Purification System

Indoor Air: High Concentrations of Biological Contaminants

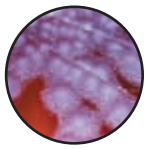
With tighter building construction in recent years, the quality of indoor air has declined dramatically.

The air circulating in the ductwork of the average home or office can be concentrated with contaminants including molds, bacteria, viruses, and dust mites. We fill our lungs up to 20,000 times each day. Over time, these contaminants can cause inflammation of the mucous membranes, upper respiratory problems, asthmatic conditions, headaches, and flu-like symptoms.

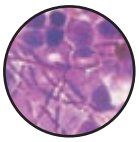
Filtering systems offer little or no help because these airborne contaminants either pass through the filter or simply collect on the filter medium, creating a breeding ground. Now, with the UV-Aire® Air Purifying System, a solution is available to directly address the problems associated with poor indoor air quality.



Fungus



Mold

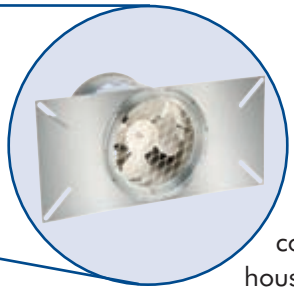


Bacteria

Dust Mites

The Sun: Nature's Outdoor Air Purifier

For years, scientists have known that one of the most effective air purifiers is natural sunlight. Not the light we see when we look out the window, but the invisible "C" band, ultraviolet rays that make up part of the sun's light spectrum. The sun's UV-C rays act as a natural outdoor air purification system, inhibiting the growth and reproduction of bacteria, viruses, fungi, molds, and dust mites. However, this natural process does not occur indoors. Ultraviolet radiation (UV-C) replicates the natural outdoor purification system of the sun by destroying the illness and disease-causing microbes living and multiplying in indoor air. In combination with a quality filter, it is the most effective way to reduce airborne contaminants and the health risks they represent.



EL-1 Eliminator® Foundation Vent Fan

Eliminate Moisture Problems

Excessive moisture under a house can contribute to air pollution inside the house. The Eliminator® Foundation Vent Fan is a motorized fan designed for circulating outside air through the crawl space of a structure to reduce moisture and moisture-related problems. In addition to dry rot, fungus growth and increasing termite potential, excessive moisture can generate mold. Mold and mold spores can infiltrate the living space as well as the HVAC system, causing problems for the inhabitants.

With the Eliminator, air changes are increased dramatically for better moisture removal and control. The EL-1 is designed to be mounted to a crawl space vent. It operates off a temperature switch which activates the motor at or above 50°F. An optional, adjustable de-humidistat can be used to activate the unit at varying levels of relative humidity. This optional control can be wired in place of, or in series with, the standard temperature switch.

UVaire® BY FIELD CONTROLS Air Purification System

Facts About Indoor Air

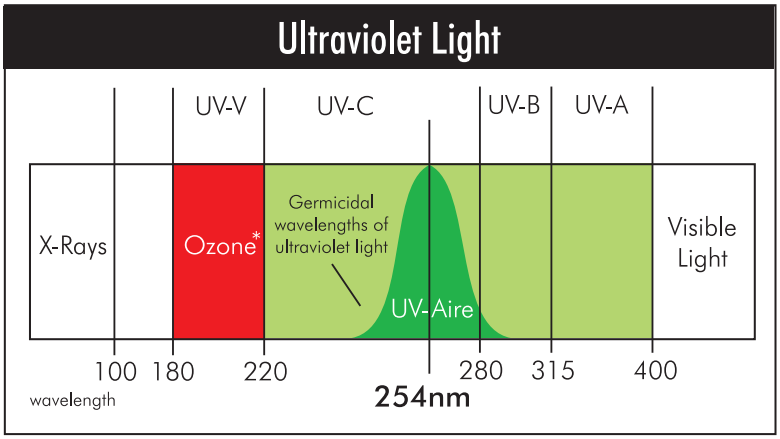
- According to the Environmental Protection Agency, the air in homes can be up to 100 times more polluted than outdoor air.[1]
- The National Academy of Sciences Institute of Medicine reports that exposure to indoor pollutants is a key contributor to the asthma problems of this nation.[2]
- Most allergy and asthma sources are passed from person to person through the air.
- The air in a single room can contain hundreds of thousands of infectious bacteria, viruses, fungal spores, and contaminants, which can only be seen with a microscope.
- Health effects may show up immediately, or after years of exposure to poor indoor air quality. These symptoms include some respiratory diseases, heart disease, and cancer. They may be severely debilitating or fatal.[3]

UV-Aire®
UV-16/24
w/transformer

UV-Aire®
Standard model

Facts About UV

- The disinfection of medical equipment using UV has been a common and reliable practice.[4]
- UV disinfection has been determined to be adequate for inactivating bacteria and viruses.[5]
- The germicidal effects of UV light cause photochemical damage to DNA and RNA within microorganisms.[6]
- "...ultraviolet radiation, properly integrated with heating, ventilating, and air conditioning systems, shows the most promise as a widely applicable means of air disinfection." Richard Riley, M.D.[7]



* The UV-V wavelength generates ozone. According to the Environmental Protection Agency, ozone can be harmful to your health. When inhaled, ozone can damage the lungs. Relatively low amounts of ozone can cause chest pain, coughing, shortness of breath, and throat irritation. Ozone can also compromise your ability to fight respiratory infections. *All UV-Aire lamps are coated to block this wavelength.*

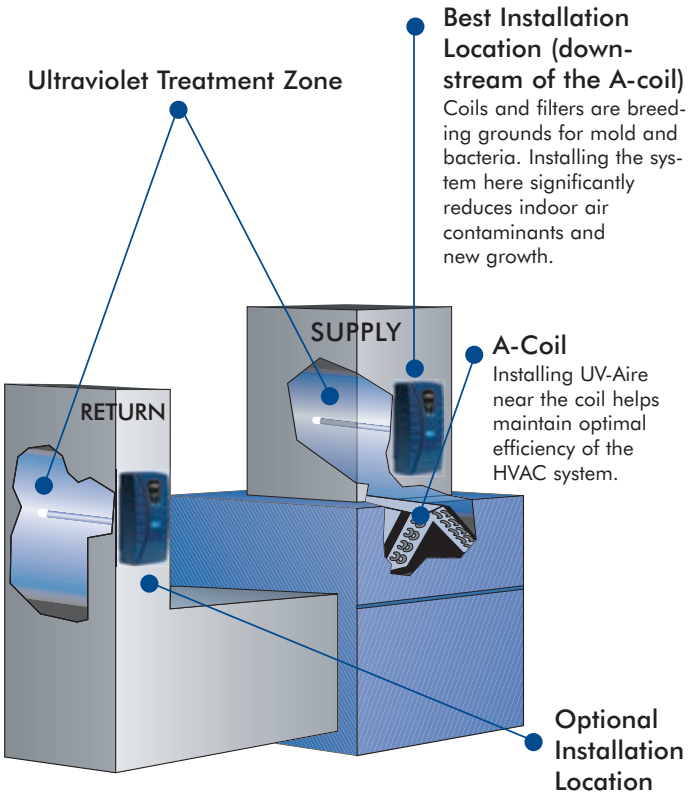
1. *http://www.epa.gov/iaq/ - 5/16/01*
2. *http://www.epa.gov/iaq/asthma/intro/index.html#WhoGetsAsthma? - 5/16/01*
3. *http://www.epa.gov/iaq/ia-intro.html*
4. *"UVGI Design Basics" HPAC. January 2000.*
5. *EPA Guidance Manual Alternative Disinfectants and Oxidants. April 1999.*
6. *Jagger, J. 1967. Introduction to Research in Ultraviolet Photobiology. Prentice-Hall, Inc., Englewood Cliffs, NJ*
7. *Richard Riley, M.D. "Airborne Infection" The American Journal of Medicine, September 1974, Vol. 57*

UVaire BY FIELD CONTROLS Air Purification System

How The In-duct UV-Aire Works

UV-Aire uses the energy from a specially designed, high-intensity UV-C lamp to reduce microorganisms in the entire home as they cycle through the HVAC system. Mounted inside the ductwork, the UV-Aire sterilizes or kills most contaminants as they pass the lamp.

The process requires very little maintenance and costs just pennies a day to operate. The UV-Aire could be one of the best health and comfort investments a homeowner ever makes.


Ultraviolet Treatment Zone
Best Installation Location (down-stream of the A-coil)
Coils and filters are breed-ing grounds for mold and bacteria. Installing the sys-tem here significantly reduces indoor air contaminants and new growth.
SUPPLY
A-Coil
Installing UV-Aire near the coil helps maintain optimal efficiency of the HVAC system.
RETURN
Optional Installation Location

Indoor Air Treatment With UV

UV's effectiveness in killing bacteria is directly related to a microorganism's exposure time. Indoor air in a typical residential forced-air HVAC system will be recirculated 40-75 times a day. With a UV generating lamp mounted in the HVAC duct, cumulative exposure can be very effective in controlling indoor bacteria.

UV rays will also kill germs that breed in drain pans and A-coils. Properly positioned, an ultraviolet system can significantly reduce indoor air contamination and prevent the growth of new microorganisms.

The treatment of indoor air with ultraviolet radiation has been successful in health care facilities, food processing plants, schools, laboratories and other applications. It is safe, silent, and proven.

Since direct exposure to UV light can cause skin cancer and blindness, the most practical application of UV light in the home or office is in the main air distribution (heating and/or air conditioning) system. As UV light will not pass through metal, glass, or plastic, a UV light can be installed in the main supply or return duct of a central heating or air system without concern for direct exposure to eyes or skin. This is an ideal location since the air in the home or office will pass through the HVAC system up to 75 times per day during normal operation, and as many as 150 times per day in continuous fan mode.

Filter Systems Alone Don't Solve the Problem

The majority of indoor air is conditioned by forced-air heating and cooling (HVAC) systems. Standard fiber air filters are entirely ineffective in trapping germs, as most particles are simply too small, passing through the porous filter. New, high efficiency style filters will only capture airborne bacteria down to a certain size. These high efficiency filters are nominally effective, trapping small airborne contaminants on the filter, creating a breeding ground where germs can continue to grow and multiply.

HVAC systems are a dark and damp breeding ground for mold and bacteria, particularly at the system filter and air conditioning A-coil. The buildup of matter on the A-coil and filter can significantly reduce the efficiency of the appliance by constricting and reducing air flow. This means increased cost to the homeowner in addition to the risk of airborne pollutants.

UVaire® BY FIELD CONTROLS Air Purification System (In-duct Models)

STANDARD MODELS
UV-12, UV-18, UV-28, UV-12HP, UV-18HP, UV-28HP

- Hinged cover for easy accessibility
- Includes patent pending angle bracket and duct board mounting kit
- Installs easily and plugs into a standard 120V outlet
- All UV-HP (heatpump) models are 240V

DUAL LAMP MODEL
UV-18X

- Double lamp maximizes intensity and effectiveness
- Handles up to 4000 sq. ft.
- Includes patent pending angle bracket and duct board mounting kit
- Installs easily and plugs into a standard 120V outlet

CIRCUIT BOARD MODELS
UV-12C, UV-18C, UV-28C, UV-12HPC, UV-18HPC, UV-28HPC

- Electronically monitors lamp life
- Audible and visual lamp replacement alerts
- Can wire into the thermostat to extend lamp life
- Can link to existing security system
- Includes all features of standard models
- All UV-HPC (heatpump) models are 240V

EXTERNAL MODELS
UV-12E, UV-18E, UV-28E

- For outdoor installations
- Ideal for any external package systems
- For rooftop applications
- Hard wired for 120V, 208V, or 240V

REMOTE MODEL
UV-16/120

- 120 Volt
  Plugs into standard outlet
- Compact Design
  Fits in tight spaces
- Built-In Safety Switch
  Designed to light only inside the duct
- E-Z Lamp Replacement
  Simple twist and lock

24 VOLT MODEL
UV-16/24

- 24V Plug-in Transformer Included
  No electrician required
- Compact Design
  Fits in tight spaces
- Built-In Safety Switch
  Designed to light only inside the duct
- E-Z Lamp Replacement
  Simple twist and lock

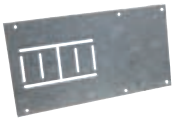
For maximum square footage and other details, see the Models and Specifications table.

c UL us **All units are UL listed.**

Unique Features

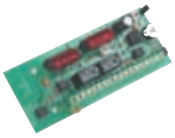
ANGLE BRACKET WITH SWIVEL ARM

- Angle allows longer lamps to fit into smaller ductwork, maximizing effectiveness
- Ensures the entire cross section of the duct is irradiated
- Swivel arm allows for easy lamp replacement
- Patented



DUCT BOARD MOUNTING KIT

- Makes mounting to duct board simple
- Designed to increase stability on the duct board



IMPROVED LAMP OUTPUT

- Technical enhancement improves intensity output over the life of the lamp

CIRCUIT BOARD TECHNOLOGY

- Monitors performance and lamp life
- Audible and visual lamp replacement alerts
- Can link with existing security system
- Can wire into the thermostat circuit

UVaire® BY FIELD CONTROLS Air Purification System (Portable Models)

UV-500C PORTABLE MODEL

- Uses UV germicidal light, carbon, and high efficiency filtration
- Quiet fan with three speed control
- Purifies air in areas up to 500 square feet
- Circuit board monitors lamp and filter life
- Visual lamp and filter replacement alerts
- Plugs into any standard 120V outlet

UV-500C Features

1. Built-in handles
2. 10"x10" high-efficiency/carbon filter
3. 8" germicidal UV lamp
4. Adjustable fan control
5. Visual lamp and filter condition alert
6. Heavy-duty fan
7. Rubber feet

Replacement Kit
- 4 high-efficiency/ carbon filters
- 1 UV lamp

UV-1500C PORTABLE/WALL/CEILING MODEL

- Purifies air in areas up to 1500 square feet
- Sits on the floor, hangs on the wall, or installs in drop ceiling
- Built-in fan with adjustable speed control
- Circuit board technology monitors lamp life
- Audible and visual lamp replacement alerts
- Plugs into any standard 120V outlet
- Uses UV germicidal light, carbon, and high efficiency filtration

Drop ceiling installation

UV-1500C Features

1. Recessed handle
2. Carbon filter
3. 12" germicidal UV lamp
4. Adjustable fan control
5. Visual and audible lamp condition alert
6. Heavy-duty fan
7. 12" x 12" high-efficiency/carbon filter
8. Rubber feet

Replacement Kit
- 1 carbon filter
- 4 high-efficiency/ carbon filters
- 1 UV lamp

UVaire® BY FIELD CONTROLS Air Purification System

Independent Lab Testing

For many years, ultraviolet light has proven effective in sterilizing medical equipment, purifying water, and processing food. Currently, the use of UV lights is gaining industry acceptance in HVAC applications. Microbe Management, Inc., a testing agency in Greenville, NC, has conducted three separate tests to examine UV's effect on indoor air quality. The test results conclude that UV is an integral part of a whole house approach to improving Indoor Air Quality.

Attack the Source

While experts disagree on the root causes of many IAQ problems, there is consensus that stopping problems at the source is crucial to long-term air quality improvement. First, the homeowner must eliminate any unwanted sources of moisture in the home, such as roof leaks, drainage problems, and crawl space moisture.

Note: Crawl space moisture can be addressed with the EL-1 Eliminator Foundation Vent Fan.

EL-1 Eliminator Foundation Vent Fan

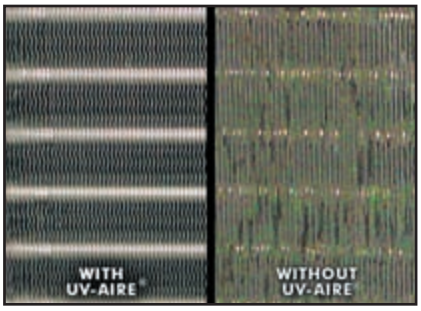
The air conditioning coil must be addressed since it is a natural breeding ground for molds, which thrive in a dark, moist environment. Familiar with the rank smell generated when switching from air conditioning to heat mode? That is the smell of mold and bio-film burning off the coil. Whenever the blower is engaged, mold spores from contaminated A-coils are released into the ductwork and distributed throughout the building. These spores then seek alternative surfaces in other parts of the home to breed and multiply.

Surface Test: UV Kills and Prevents Mold on A-Coils

A specific test was designed to determine UV's effectiveness in treating mold on coil surfaces. The test simulated the damp, dark settings where A-coils are found.

In this study "We took a standard A-coil, sterilized it, introduced two kinds of mold, and then placed it in a controlled, moisture-laden environment," says Bernard Kane, of Microbe Management. "We created two separate chambers in our lab. One chamber was bathed in UV light. The other was not."

The results were dramatic and conclusive. The side of the A-coil that was exposed to the ultraviolet light was clean and clear of mold growth. Mold continued to grow unabated on the side without UV. Subsequently, the contaminated side was bathed in UV light and the mold was eradicated. Kane summarized the results: "Properly positioning a UV lamp over the A-coil in a residential or commercial air conditioning system can eliminate surface mold on the coil and prevent future mold growth as well."



Surface Test Results

Airborne Testing: Single Pass and Cumulative Tests

Bacteria and viruses are introduced into the building by its occupants and often cannot be controlled at the source. Therefore, it is important to attack these airborne invaders early and often, before they have an opportunity to multiply. The single pass test proves that UV effectively kills these airborne microorganisms in the duct.

Since HVAC systems typically re-circulate the air 40-75 times per day, a multi-pass, cumulative test was also conducted. Results demonstrate that repeated, multi-pass exposure to UV light dramatically reduces the concentration of bacteria and viruses throughout the home.[1]

1. *Efficiency of Bacterial Disinfection by a Duct-mounted UV-Aire® Air Purifier: by Microbe Management*

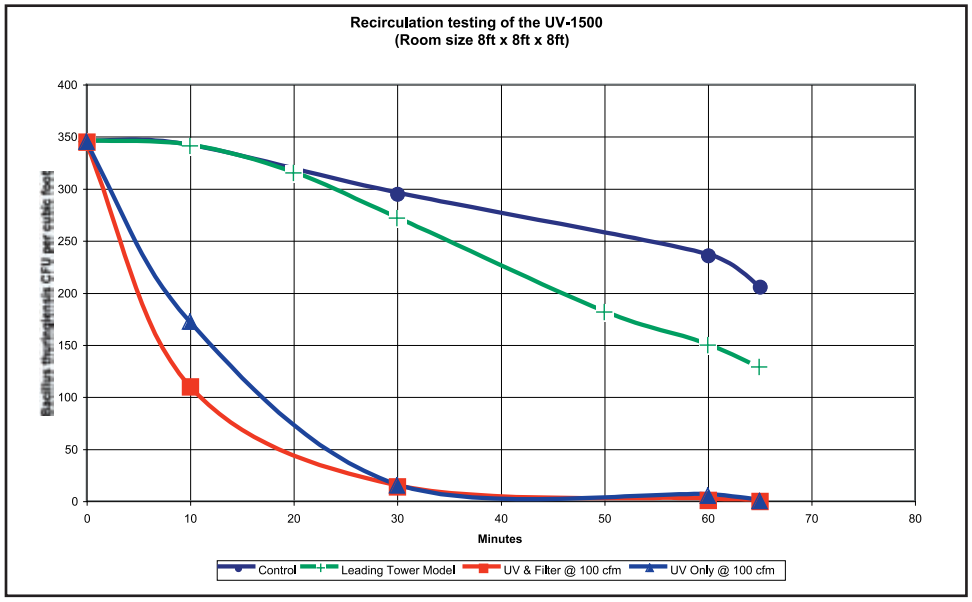
Single Pass Test: UV Deadly for Airborne Microbes

This study introduced a common bacterium into a galvanized air duct equipped with a UV light to determine how effective the lamp would be in reducing the bacteria with one exposure, or a "single pass." The tests were conducted at two speeds: 1125 cfm and 2250 cfm in an 18" x 18" duct. The UV lamp yielded at least a 90% reduction of the test bacteria with a single airflow pass at 1125 cfm, and at least 71% reduction at 2250 cfm.

Cumulative Tests: Multiple Exposures Dramatically Improve IAQ

To further investigate the effectiveness of UV on indoor air quality, Microbe Management created a series of tests designed to measure the cumulative effect of UV in reducing airborne contaminants. The tests were performed in a structure with two isolated 8' x 8' x 8' rooms where air could be sampled. In the control room, no UV was present, while the other room utilized a portable UV air purifier.

According to Bernard Kane, Ph. D., of Microbe Management, "Test results were very encouraging. In both rooms, we introduced a resistant, spore-forming bacteria until the air was saturated with 350 colonies per cubic foot. In the room with the portable UV unit, the spore count was reduced by 50% in just 10 minutes and by 98% within 30 minutes. In the control room, without UV, more than 85% of the bacteria were still active after thirty minutes." Similarly, the leading consumer UV "tower" model was also tested, but showed only minimal effectiveness. (See chart below.)



Conclusion: UV Is An Effective Part of "Whole House" Solution

A-coil irradiation, single pass, and cumulative tests confirm that UV is an important and effective contributor to a healthier home environment. UV technology used with a quality filter (MERV rated 8 or higher) will dramatically improve Indoor Air Quality. Additionally, portable units can be used in combination with in-duct models. This combination is strongly recommended for individuals with depressed immune systems, asthma, allergies, or other respiratory conditions. For homes without forced-air, portable UV air purifiers are recommended to enhance IAQ. Also, health care professionals, teachers, and day-care workers can benefit from additional UV protection from influenza and other viruses.

UVaire® BY FIELD CONTROLS Air Purification System

UV Energy Required To Kill Bacteria

Most, if not all bacteria can be destroyed by the use of UV light. The main factors in disinfection are the amount of UV power the lamp produces and the length of time the bacteria is exposed to the UV light source.

The energy required to kill microorganisms is a product of the UV light's intensity and exposure time. This energy is measured in microwatt seconds per square centimeter.

Intensity x Exposure Time = microWatt seconds/cm^2

Table 1 lists the amount of UV energy (measured in μW-sec/cm^2) necessary to destroy various bacteria.

Independent lab testing of the UV-Aire shows that in a single-pass air flow test, one 18-inch UV-Aire lamp can reduce levels of Serratia Marcescens (a typical bacteria) by 93%, while a two lamp system can reduce by 99%.[1]

The calculated average UV energy output levels of a single UV-Aire lamp in an 18-inch square duct is 2,608 μW-sec/cm2 and 6,186 μW-sec/cm^2 for a two lamp system. The 6,186 is comparable to the 99% energy required for Serratia Marcescens. It can be seen that there is a direct correlation between the UV-Aire UV lamp output and the observed kill rates in the lab.

Correlating The Lab Test With Other Bacteria

Use the chart below to estimate the effectiveness of the UV-Aire with other bacteria.

Harder–to–kill bacteria and molds require greater energy or exposure time to be as effective. For example, 99% reduction of Rotavirus requires 24,000 μW-sec/cm^2 of UV energy versus 6,600 μW-sec/cm^2 for Influenza virus (see table below). This means that Rotavirus spores are five times more resistant than Influenza. Consequently, spores will require five times the UV output energy from the lamp or five times greater exposure time. For practical purposes, we recommend trapping the spores in a high efficiency filter downstream of the UV-Aire which can be irradiated continuously with the UV-Aire lamp.

For details of the lab test ask for form number 4291.

1. Efficiency of Bacterial Disinfection by a Duct-mounted UV-Aire® Air Purifier: by Microbe Management

Bird Flu Virus (Avian Flu)

The Bird Flu Virus is a type of Influenza. Since the kill rate for the influenza virus is 6,600 microwatts of UV energy, it is reasonable to conclude that the Bird Flu virus can be reduced or eliminated by 6,600-10,000 microwatts.

Lamp Intensity

Distance from Lamp	Intensity Factor	Distance from Lamp	Intensity Factor
0	354	15"	6
1"	127	20"	4
2"	69	25"	3
4"	32	30"	2
6"	20	35"	1.4
8"	14	39.97"	1
10"	14		

UV lamp intensity is rated at a distance of one meter. To determine the intensity of ultraviolet radiation at different distances from the lamp, multiply the intensity of the lamp by the intensity factor shown in the models and specifications chart.

Example: To determine the ultraviolet intensity of the UV-18 at a distance of six inches, multiply 73 by 20 to yield 1460 μW-sec/cm^2.

UV dose required for the de-activation of various microbes

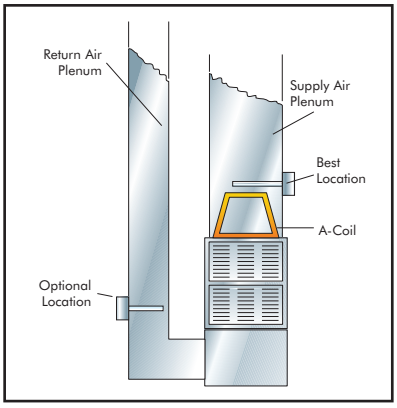
Bacteria	UV Dose	Mold	UV Dose
Serratia Marcescens	6,160	Aspergillus amstelodami	77,000
Legionnella bozemanii	3,500	Mucor Mucedo	77,000
Legionnella micdadei	3,100	Penicillium chrysogenum	56,000
Mycobacterium tuberculosis	10,000	**Yeast**	**UV Dose**
Salmonella enteritidis	7,600	Baker's Yeast	8,000
Salmonella typhi (Typhoid Fever)	7,000	Brewer's Yeast	13,200
Streptococcus hemolyticus	5,500		
Virus	**UV Dose**		
Adeno Virus Type III	4,500		
Infectious Hepatitis	8,000		
Influenza	6,600		
Rotavirus	24,000		

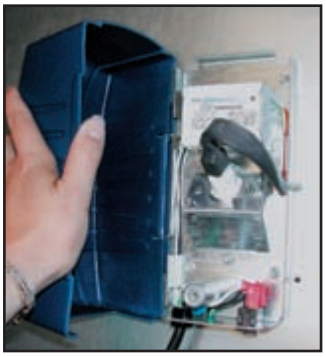
UV dose is measured in microwatt seconds per centimeter squared (μW-sec/cm2). The information presented is intended to give the reader a general idea of how UV disinfects, based upon various credible resources. We do not guarantee its accuracy in any way.

UVaire® BY FIELD CONTROLS Air Purification System

Installation

1. Insert the unit downstream from an A-coil in the supply plenum or downstream from the air filter in the return plenum. Mount base on duct using the enclosed mounting screws.
2. Insert lamp through hole. Place bracket over end of tube and tighten wing nut.
3. Replace cover on unit and tighten side screw.
4. Plug into 120V outlet & place rocker switch in "ON" position.
5. Switch will illuminate & blue glow can be seen through view port when unit is operating properly.





ALWAYS wear protective goggles to shield your eyes from UV damage when installing the UV-Aire.

UV-C can break down plastic material that is not UV resistant. Based on lab tests, positioning the lamp 30 inches or more away from plastic surfaces such as flex duct, drain pans, etc. will prevent any measurable break down.

Installation Options

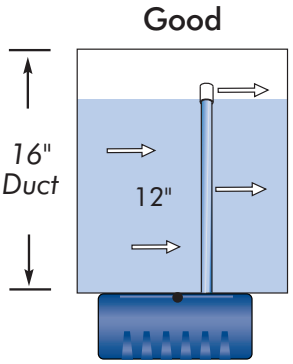
The UV-Aire can be installed in ducts nine inches and larger. Each unit comes with a duct board mounting kit and a patent-pending angle bracket. A dual lamp model is available for commercial applications and/or increased potency. There is also a model designed specifically for heat pumps and a model for outdoor installations.

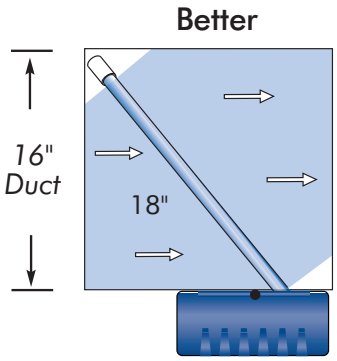
Good: Standard Installation

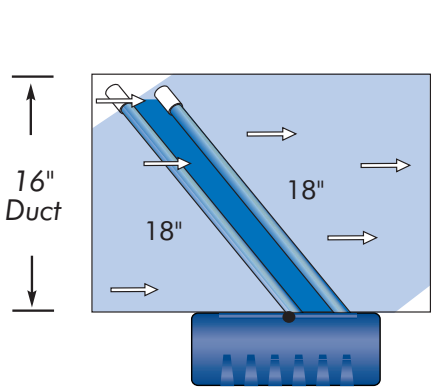
Better: Patented Angled Installation - Single Lamp

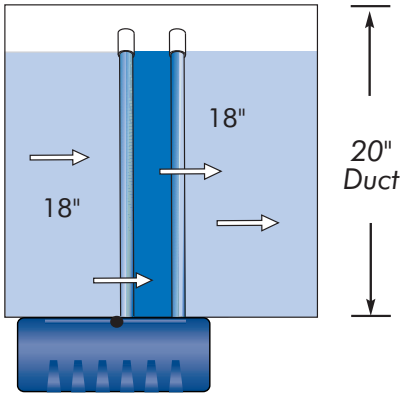
Best: Two Angled Lamps or Two Lamps Perpendicular

Note: When multiple lamps are used, spacing between lamps should be at least four inches. Angle option allows longer lamps to fit in smaller ducts.









Models & Specifications

Model	Minimum Duct Width	Voltage	Amps	Hz	Watts	Circuit Board	Recommended Max. Sq. Ft.	Lamp Intensity at 1 meter $\mu W/cm^2$	Product Warranty
UV-12	9	120	0.5	60	30	no	1500	37	5 yr
UV-18	14	120	0.5	60	30	no	2000	73	5 yr
UV-28	22	120	1.1	60	60	no	3000	105	5 yr
UV-12E**	9	120/208/240	0.5	60	30	no	1500	37	5 yr
UV-18E**	14	120/208/240	0.5	60	30	no	2000	73	5 yr
UV-28E**	22	120/208/240	1.1	60	60	no	3000	105	5 yr
UV-12HP	9	240	0.5	60	30	no	1500	37	5 yr
UV-18HP	14	240	0.5	60	30	no	2000	73	5 yr
UV-28HP	22	240	1.1	60	60	no	3000	105	5 yr
UV-12C	9	120	0.5	60	30	yes	1500	37	1 yr
UV-18C	14	120	0.5	60	30	yes	2000	73	1 yr
UV-28C	22	120	1.1	60	60	yes	3000	105	1 yr
UV-12HPC	9	240	0.5	60	30	yes	1500	37	1 yr
UV-18HPC	14	240	0.5	60	30	yes	2000	73	1 yr
UV-28HPC	22	240	1.1	60	60	yes	3000	105	1 yr
UV-18X*	14	120	1.0	60	60	no	4000	2@73	5 yr
UV-500C	NA	120	0.4	60	36	yes	500	24	1 yr
UV-1500C	NA	120	0.5	60	30	yes	1500	37	1 yr
UV-16/120	16	120	0.5	60	30	no	2000	62	5 yr
UV-16/24	16	24	1.3	60	30	no	2000	62	5 yr
EL-1***	Fits any crawl space vent	120	0.6	60	35	-	1000	-	1 yr
EDH-1***	Humidity Switch	@120	12 max	-	-	-	-	-	1 yr

NEW

* UV-18X includes two lamps.
** UV-E series includes aluminum NEMA 3 enclosures for external, outdoor installation.
*** The EL-1 Eliminator and the EDH-1 De-Humidistat are not UV-Aire products but are recommended to help control and reduce moisture and moisture related problems in crawl spaces.

Note: All lamps are warranted for 90 days after installation. A UV-Aire counter display is available. For more information, contact Field Controls.

Replacement Parts

UV-500C Replacement Kit
- 4 high-efficiency/ carbon filters
- 1 UV lamp

UV-1500C Replacement Kit
- 1 carbon filter
- 4 high-efficiency/ carbon filters
- 1 UV lamp

UV-Aire Germicidal Lamps
- 8", 12", 16", 18" and 28"

UV-500C Filter Pack
- 4 high-efficiency/ carbon filters
- A one year supply

UV-1500C Filter Pack
- 1 carbon filter
- 4 high-efficiency/ carbon filters
- A one year supply

It is important that lamps be replaced when the ultraviolet output falls below minimum requirements for protection. Even though a lamp will appear to be operating effectively because it still maintains the visible blue glow, the ultraviolet output will be significantly reduced after 9000 hours of use. **To maintain maximum benefits, lamps should be replaced annually.**

FIELD CONTROLS
Solutions for the Great Indoors®

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